

In The Claims

Please amend the claims as follows:

CLAIMS

1. (ORIGINAL) A dry premix comprising a hydraulic binder, finely ground slag, a fluidifier and/or superfluidifier, a setting regulator, and aggregates characterized as follows:

- (i) the aggregates are made up, for 75-95 wt%, of three highly monogranular fractions (A, B, C), having a characteristic grain diameter increasing progressively from A to B to C.
- (ii) the ratio between the characteristic grain diameters of the fractions C and B is comprised between 2.2 and 3.2;
- (iii) the ratio between the characteristic grain diameters of the fractions B and A is comprised between 2.2 and 3.2;
- (iv) the remaining portion of aggregates (5-25 wt%) consists of a fourth fraction (D) having a low monogranularity; and
- (v) Fraction A represents at least 40 wt% of the total aggregates present in the dry premix.

2. (ORIGINAL) The premix according to Claim 1, where the ratio between the characteristic grain diameters of the fractions C/B and/or B/A is comprised between 2.5 and 3.0.

3. (CURRENTLY AMENDED) The premix according to Claims 1-2, wherein the fractions A, B, C represent 85-92 wt% of the total aggregates, and the fraction D represents 8-15 wt% of the total aggregates.

4. (CURRENTLY AMENDED) The premix according to Claims 1-3, wherein ~~in which~~ the division in weight percentage of the three fractions A, B, C, with respect to their sum, is the following:

- Fraction A: 50 wt% – 70 wt%;
- Fraction B: 10 wt% – 20 wt%;
- Fraction C: 18 wt% – 32 wt%.

5. (CURRENTLY AMENDED) The premix according to Claims 1-4, in ~~which~~wherein the division in weight percentage of the three fractions A, B, C, with respect to their sum, is the following:

- Fraction A: 55 wt% – 65 wt%;
- Fraction B: 12 wt% – 18 wt%;
- Fraction C: 21 wt% – 29 wt%.

6. (CURRENTLY AMENDED) The premix according to Claims 1-5, in ~~which~~wherein the characteristic grain diameter X_0 of the different fractions of aggregates is the following:

- Fraction A: 0.2 – 0.4 mm;
- Fraction B: 0.6 – 0.8 mm;
- Fraction C: 1.6 – 2.4 mm;
- Fraction D: 0.1 – 0.3 mm

7. (CURRENTLY AMENDED) The premix according to Claims 1-6, where the aggregates as a whole represent from 40 wt% to 60 wt% of the dry premix.

8. (CURRENTLY AMENDED) The premix according to Claims 1-7, where the hydraulic binder is a Portland cement.

9. (CURRENTLY AMENDED) The premix according to Claims 1-8, where the fluidifiers/superfluidifiers are compounds of a melaminic, naphthalenic, or acrylic type.

10. (CURRENTLY AMENDED) The premix according to Claims 1-9, where the setting regulators are citric acid, boric acid, and tartaric acid.

11. (ORIGINAL) A pourable cementitious mortar comprising water, a hydraulic binder, finely ground slag, a fluidifier and/or superfluidifier, a setting regulator, and aggregates, characterized as follows:

- (i) the aggregates are made up, for 75-95 wt%, of three highly monogranular fractions (A, B, C) having a characteristic grain diameter increasing progressively from A to B to C.
- (ii) the ratio between the characteristic grain diameters of the fractions C and B is comprised between 2.2 and 3.2;
- (iii) the ratio between the characteristic grain diameters of the fractions B and A is comprised between 2.2 and 3.2;
- (iv) the remaining portion of aggregate (5-25 wt%) consists of a fourth fraction (D) having a low monogranularity; and
- (v) fraction A represents at least 40 wt% of the total aggregates present in the mortar.

12. (CANCELLED)

13. (CURRENTLY AMENDED) A method of using~~Use of~~ a pourable mortar according to ~~Claim 14~~ comprising water, a hydraulic binder, finely ground slag, a fluidifier and/or superfluidifier, a setting regulator, and aggregates, characterized as follows:

- (i) the aggregates are made up, for 75-95 wt%, of three highly monogranular fractions (A, B, C) having a characteristic grain diameter increasing progressively from A to B to C.
- (ii) the ratio between the characteristic grain diameters of the fractions C and B is comprised between 2.2 and 3.2;

- (iii) the ratio between the characteristic grain diameters of the fractions B and A is comprised between 2.2 and 3.2;
- (iv) the remaining portion of aggregate (5-25 wt%) consists of a fourth fraction (D) having a low monogranularity; and
- (v) fraction A represents at least 40 wt% of the total aggregates present in the mortar, for applications in the cement sector.

14. (CURRENTLY AMENDED) ~~Use~~The method according to Claim 13, for the recovery of deteriorated building works, consolidation of rock formations, structural reinforcement, injection in the conduits of tendons, immobilization of toxic-noxious refuse, and in the production of cementitious products by means of pouring in moulds.

15. (CURRENTLY AMENDED) ~~The method~~Use according to Claim 14, in which said moulds are foundry earth moulds.

16. (CURRENTLY AMENDED) A process for preparing a pourable mortar with a high degree of fluidity, ~~said process comprising~~characterized by mixing together water and ~~the components of the dry premix defined in Claims 1-10a~~ a hydraulic binder, finely ground slag, a fluidifier and/or superfluidifier, a setting regulator, and aggregates characterized as follows:

- (i) the aggregates are made up, for 75-95 wt%, of three highly monogranular fractions (A, B, C), having a characteristic grain diameter increasing progressively from A to B to C;
- (ii) the ratio between the characteristic grain diameters of the fractions C and B is comprised between 2.2 and 3.2;
- (iii) the ratio between the characteristic grain diameters of the fractions B and A is comprised between 2.2 and 3.2;
- (iv) the remaining portion of aggregates (5-25 wt%) consists of a fourth fraction (D) having a low monogranularity; and

- (v) fraction A represents at least 40 wt% of the total aggregates present in the dry premix.

17. (CURRENTLY AMENDED) The process for preparing cementitious products, characterized by pouring and solidifying in appropriate moulds a mortar according to Claim 11.

18. (CURRENTLY AMENDED) A cementitious product obtainable by means of the process described in Claim 16.

19. (CURRENTLY AMENDED) The cementitious product comprising characterized in that it contains the components described in Claim 1a hydraulic binder, finely ground slag, a fluidifier and/or superfluidifier, a setting regulator, and aggregates characterized as follows:

- (i) the aggregates are made up, for 75-95 wt%, of three highly monogranular fractions (A, B, C), having a characteristic grain diameter increasing progressively from A to B to C;
- (ii) the ratio between the characteristic grain diameters of the fractions C and B is comprised between 2.2 and 3.2;
- (iii) the ratio between the characteristic grain diameters of the fractions B and A is comprised between 2.2 and 3.2;
- (iv) the remaining portion of aggregates (5-25 wt%) consists of a fourth fraction (D) having a low monogranularity; and
- (v) fraction A represents at least 40 wt% of the total aggregates present in the dry premix.

20. (CURRENTLY AMENDED) A cementitious composition useful for preparing high-resistance cementitious products, obtainable by mixing together the components indicated in Claim 1 or in Claim 11a hydraulic binder, finely ground slag, a fluidifier and/or superfluidifier, a setting regulator, and aggregates characterized as follows:

- (i) the aggregates are made up, for 75-95 wt%, of three highly monogranular fractions (A, B, C), having a characteristic grain diameter increasing progressively from A to B to C.;
- (ii) the ratio between the characteristic grain diameters of the fractions C and B is comprised between 2.2 and 3.2;
- (iii) the ratio between the characteristic grain diameters of the fractions B and A is comprised between 2.2 and 3.2;
- (iv) the remaining portion of aggregates (5-25 wt%) consists of a fourth fraction (D) having a low monogranularity; and
- (v) fraction A represents at least 40 wt% of the total aggregates present in the dry premix.

20. (NEW) A cementitious composition useful for preparing high-resistance cementitious products, obtainable by mixing together water, a hydraulic binder, finely ground slag, a fluidifier and/or superfluidifier, a setting regulator, and aggregates, wherein

- (i) the aggregates are made up, for 75-95 wt%, of three highly monogranular fractions (A, B, C) having a characteristic grain diameter increasing progressively from A to B to C.
- (ii) the ratio between the characteristic grain diameters of the fractions C and B is comprised between 2.2 and 3.2;
- (iii) the ratio between the characteristic grain diameters of the fractions B and A is comprised between 2.2 and 3.2;
- (iv) the remaining portion of aggregate (5-25 wt%) consists of a fourth fraction (D) having a low monogranularity; and
- (v) fraction A represents at least 40 wt% of the total aggregates present in the mortar.